

## ABSTRACT OF THE DISCLOSURE

Lasers and Method of Making Them

A semiconductor laser structure comprises an active laser layer of high refractive index; on each side of the active layer, a graded-index layer; on each side 5 of the respective graded-index layer a cladding layer of low refractive index, and at least one optical trapping layer is inserted within one or each of the cladding layers. The optical trapping layer, or each of them, is thin compared with its distance from the active layer and the cladding layers have substantially the same, uniform refractive index. In consequence of this combination of features, it becomes 10 possible to set the confinement factor by choosing only the thickness of the optical trapping layer and the divergence (VFF) by choosing only its position, within useful ranges.